Appl. No. 09/775,715
Reply dated 7/23/2003
Reply to Office Action mailed May 8, 2003

1.    Amendments to the Claims:

1.(Currently Amended)    A system for ~~user behavior based ranking of a document~~,

comprising:

means for determining a feature vector associated with a document, the feature vector

comprising weights for certain terms that appear in the document; and

means for modifying the feature vector for the document based on a sample of user

actions captured during a search session so that the document is more highly ranked in response

to the user actions.

2. (Previously Amended)    The system of Claim 1 further comprising means for

capturing user actions in response to a list of documents produced in response to a query wherein

the user actions include selecting a document from the list of documents.

3.(Original)    The system of Claim 2 further comprises means for adjusting the weights

of the terms in the feature vector that match terms in a query that produced the list of documents

so that the ranking of the document is higher in response to the adjustment of the weights.


4.(Currently Amended)    A method for user behavior based ranking of a document,

comprising:

determining a feature vector associated with a document, the feature vector comprising

weights for one or more terms that appear in the document; and

modifying the feature vector for the document based on a sample of user actions captured

during a query of the document so that the document is more highly ranked in response to the

user actions.

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5.( Previously Amended)    The method of Claim 4 further comprising means for

capturing user actions in response to a list of documents produced in response to a query wherein

the user actions include selecting a document from the list of documents.

6.(Original)s  The method of Claim 5, wherein the modifying means further comprises

means for adjusting the frequency values of the terms in the feature vector that match terms in a

query that produced the list of documents so that the ranking of the document is higher in

response to the adjustment of the frequency values.

7.(Currently Amended)    A system for user behavior based searching of a document

based on a query having one or more query terms, comprising:

means for determining a feature vector associated with a document, the feature vector

comprising weights for certain terms that appear in the document;

means for modifying the feature vector for the document based on a sample of user

actions captured during a query of the document so that the document is more highly ranked in

response to the user actions; and

means for returning the same document to another user with the same query at a higher

ranking due to the modified feature vector.

8. (Previously Amended)    The system of Claim 7 further comprising means for

capturing user actions in response to a list of documents produced in response to a query wherein

the user actions include selecting a document from the list of documents.

9.(Original)    The system of Claim 8, wherein the modifying means further comprises

means for adjusting the frequency values of the terms in the feature vector that match terms in a

query that produced the list of documents so that the ranking of the document is higher in

response to the adjustment of the frequency values.

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10. (Currently Amended)      A method for user behavior based searching of a document

based on a query having one or more query terms, comprising:

determining a feature vector associated with a document, the feature vector comprising

frequency values for one or more terms that appear in the document;

modifying the feature vector for the document based on <u>a sample of</u> user actions captured

during a query of the document so that the document is more highly ranked in response to the

user actions; and

returning the same document to another user with the same query at a higher ranking due

to the modified feature vector.

11.( Previously Amended)      The method of Claim 10 further comprising means for

capturing user actions in response to a list of documents produced in response to a query wherein

the user actions include selecting a document from the list of documents.

12.(Original)   The method of Claim 11, wherein the modifying means further comprises

means for adjusting the frequency values of the terms in the feature vector that match terms in a

query that produced the list of documents so that the ranking of the document is higher in

response to the adjustment of the frequency values.

13. (Previously presented) A computer implemented method for user behavior based ranking

of a document, the method comprising:

ranking a document based on a feature vector of the document, the feature vector

comprising frequency values for one or more terms that appear in the document;

sampling user search behavior; and

updating the feature vector of the document based on the sampled user search behavior so

that the rank of the document is changed based on the user sampled user search behavior.

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14. (Previously presented)The method of Claim 13, wherein the sampling further comprises generating a sample of the user behavior wherein the sample of the user behavior further comprises a query feature vector of the terms in a particular query and the feature vector of the one or more documents returned based on the query and viewed by the user.

15. (Previously presented)The method of Claim 14, wherein the sample generating further comprises generating a sample during a sampling frequency.

16. (Previously presented)The method of Claim 13, wherein the updating further comprises combining the feature vector of the document with a feature vector of the query, the feature vector comprising frequency values for one or more terms that appear in the query.

17. (Previously presented)The method of Claim 16, wherein the updating further comprising scaling the query feature vector based on the viewing time of the document by the user during the sampled user behavior to generate a scaled query feature vector.

18. (Previously presented)The method of Claim 17, wherein the scaling further comprises generating a negative scaling factor in response to a short viewing time so that the scaled query feature vector is negative and the feature vector of the document is reduced and the rank of the document is reduced.

19. (Previously presented)The method of Claim 17, wherein the scaling further comprises generating a positive scaling factor in response to a long viewing time so that the scaled query feature vector is positive and the feature vector of the document is increased and the rank of the document is increased.

20. (Previously presented)A computer implemented system for user behavior based ranking of a document, the system comprising one or more computer instructions, the system comprising:

instructions for ranking a document based on a feature vector of the document, the

feature vector comprising frequency values for one or more terms that appear in the document;

instructions for sampling user search behavior; and

instructions for updating the feature vector of the document based on the sampled user

search behavior so that the rank of the document is changed based on the user sampled user

search behavior.

21. (Previously presented)The system of Claim 20, wherein the sampling further comprises

instructions for generating a sample of the user behavior wherein the sample of the user behavior

further comprises a query feature vector of the terms in a particular query and the feature vector

of the one or more documents returned based on the query and viewed by the user.

22. (Previously presented)The system of Claim 21, wherein the sample generating further

comprises instructions for generating a sample during a sampling frequency.

23. (Previously presented)The system of Claim 20, wherein the updating further comprises

instructions for combining the feature vector of the document with a feature vector of the query,

the feature vector comprising frequency values for one or more terms that appear in the query.

24. (Previously presented)The system of Claim 23, wherein the updating further comprising

instructions for scaling the query feature vector based on the viewing time of the document by

the user during the sampled user behavior to generate a scaled query feature vector.

25. (Previously presented)The system of Claim 24, wherein the scaling further comprises

instructions for generating a negative scaling factor in response to a short viewing time so that

the scaled query feature vector is negative and the feature vector of the document is reduced and

the rank of the document is reduced.

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26. (Previously presented)The system of Claim 24, wherein the scaling further comprises instructions for generating a positive scaling factor in response to a long viewing time so that the scaled query feature vector is positive and the feature vector of the document is increased and the rank of the document is increased.